



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/812,497	03/30/2004	Jing-Jong Pan	LWAVP022	3234
51111	7590	09/29/2005	EXAMINER HEALY, BRIAN	
AKA CHAN LLP 900 LAFAYETE STREET SUITE 710 SANTA CLARA, CA 95050			ART UNIT 2883	PAPER NUMBER

DATE MAILED: 09/29/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/812,497

Applicant(s)

PAN ET AL.

Examiner

Brian M. Healy

Art Unit

2883

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-32 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 22-25 is/are allowed.
- 6) ☒ Claim(s) 1-8, 26 and 32 is/are rejected.
- 7) ☒ Claim(s) 9-15, 19-21 and 27-31 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____

103 REJECTION

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Applicant may overcome the applied art either by a showing under 37 CFR 1.132 that the invention disclosed therein was derived from the invention of this application, and is therefore, not the invention "by another," or by antedating the applied art under 37 CFR 1.131.

Claims 1-8, 16-18, 26 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Abushagur, U.S.P. No. 6,832,018 in view of Lemoff et. al., U.S.P. No. 6,198,864.

Abushagur 018' teaches (Figs.1-4) an optical multiplexer/demultiplexer and method of making same including : a substrate 402, a first set of plural optical fibers 410,411, a second set of output optical fibers 412,413, a plurality of reflectors 420,421 which alternatively reflect light wavelengths to plural wavelength filters 400 in order to filter preferred wavelengths in a wavelength division multiplexer/demultiplexer setting.

Abushagur 018' does not teach or suggest a core frame structure for holding the fibers/reflectors and filters in a protective housing.

Lemoff et. al. 864' teaches (Figs.1-3) an optical multiplexer/demultiplexer and method of making same comprising: an optical fiber input 42, a unitary core housing/frame 14,76 that holds plural wavelength dependent filters 20,22,24,26 and sends a multiplexed output to outputs 60,62,64,66.

Since both Abushagur 018' and Lemoff et. al. 864' are both from the same field of endeavor, i.e, optical WDM device and method of making same, the purpose using a unitary core frame to hold/protect optical components in a unitary setting, as is taught by Lemoff et. al. 854' would have been recognized in the pertinent art of Abushagur 018'.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the optical WDM device of Abushagur 018' in order to place plural optical components such as wavelength filters, fibers and reflectors in a unitary core frame, such as that used by Lemoff et. al. 864', for the purpose of having a unitary housing for protection of optical WDM components.

ALLOWABLE SUBJECT MATTER

Claims 9-15, 19-21, and 27-31 are objected to as being dependent upon a rejected independent claim and includes allowable subject matter that would be allowable if rewritten or amended to include the limitations of the independent claim and any intervening claim.

None of the references of record teaches or suggests a multiplexer/demultiplexer device and method of making same including a plurality of

Art Unit: 2883

wavelength dependent filters mounted (Note filters are mounted using a UV curable epoxy) in a core frame (Note frame (of the specific configurations mentioned in the dependent claims) can be a unitary piece of metal such as 440C stainless steel) that comprises flexes with temperature changes.

Claims 22-25 are allowed over the prior art of record. None of the references of record teaches or suggests the claimed WDM multiplexer/demultiplexer that includes input/output optical fibers, plural wavelength dependent filters, a core assembly with a core frame and first and second moisture seals.

The following references are also cited by the Examiner as being pertinent prior art: Nosu, et. al., U.S.P. No. 4,244,045 (Figs.1-17), Grann et. al., U.S.P. No. 6,212,312 (Figs.1-8C) and Liu et. al., U.S.P. No. 6,748,133 (Figs.1-6).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian M. Healy whose telephone number is (571)272-2347. The examiner can normally be reached on Compressed schedule Tues.-Thurs. 7AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank Font can be reached on (571)272-2415. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2883

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brian M. Healy
Primary Examiner
Art Unit 2883

A handwritten signature in black ink, appearing to read "Brian Healy", with a stylized flourish at the end.

Brian Healy
Primary Examiner